

RECEIVED

AUG 1 8 2002

TECH CENTER 1600/2900

RECEIVED

AUG 0 9 2002

TECH CENTER 1600/2900



1631

1600

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/09/920,300A

TIME: 16:20:21

Input Set : A:\547.app.txt

Output Set: N:\CRF3\08062002\I920300A.raw

4 <110> APPLICANT: King, Gordon E.
 5 Meagher, Madeleine Joy
 6 Xu, Jiangchun
 7 Secrist, Heather

11 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
 12 AND DIAGNOSIS OF COLON CANCER

15 <130> FILE REFERENCE: 210121.547

C--> 17 <140> CURRENT APPLICATION NUMBER: US/09/920,300A

18 <141> CURRENT FILING DATE: 2001-07-31

20 <160> NUMBER OF SEQ ID NOS: 1789

22 <170> SOFTWARE: FastSEQ for Windows Version 4.0

24 <210> SEQ ID NO: 1

25 <211> LENGTH: 656

26 <212> TYPE: DNA

27 <213> ORGANISM: Homo sapiens

29 <220> FEATURE:

30 <221> NAME/KEY: misc_feature

31 <222> LOCATION: 544, 560, 627, 635

32 <223> OTHER INFORMATION: n = A,T,C or G

34 <400> SEQUENCE: 1

35 cctccacaaa gtgtctgtgc tgttgcgtgt ctccaagcca gtcttcatgt gtaggggtggg 60
 36 ggggtgaggac acactttcgg gctctgcagg gaggccagaa gtattcttcc ctccatcaat 120
 37 agctttcttg ttggaaggga gggaatcctt tatttcagag tcaataacaa tcttaaggac 180
 38 atctggctca gaggctgggt ctgcaagttg tttttcatte tcagaaaagt catcgtcttc 240
 39 caagtgcagg aggaggggac tgatagagtc actctcccct tgaacatcag gcaactcttt 300
 40 caaaccagtt cccaagtgtc caacctggaa agttgctctg ctccaggag gaaccttact 360
 41 aataaaagcc cgccgagcat cccctgggaa ctctgtatcc atagagctgg gtagttcagc 420
 42 caggccaaca gagtcatcat ttagttgttg attaagaaag gcaatttcat tgagcagtga 480
 43 agtcagtgtc tcatcagtat catctcatc ttccatgtta ggtcagcagt tcaactggaat 540
 44 caanactgct tctctatan ctgatgttac tttcctcagt tccatctcta tgctttgaag 600
 45 cccttgaaaa ctttcatctt ttatttntga aaaangaaga atcctttgaa tttcac 656

47 <210> SEQ ID NO: 2

48 <211> LENGTH: 373

49 <212> TYPE: DNA

50 <213> ORGANISM: Homo sapiens

52 <400> SEQUENCE: 2

53 ctgtcccatg gggctcttat tgtaatctag accatcttgt tctagatggg cacttaagcc 60
 54 ctgtttcttc atagtctgtt atgctgtcat ttggacctgg atgcttcttg tttcttccag 120
 55 caatttttgt ttgtgttttt ttgtgttgaa gagaggaaca tttaaggagt tagataaact 180
 56 ggtaattttc agatgtgtag aaaattgcat aggtgggtgaa agccaatgcc ataggctctg 240
 57 aaattttact atttctaca tcaggaaatg tgtacaaaaa gtgctaaaat gccagaata 300
 58 attttgagta tctaaagata gataaatctt ttcactctgag tggaaatggc attatgactt 360
 59 tatattctca tgg 373

ENTERED

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/09/920,300A

TIME: 16:20:21

Input Set : A:\547.app.txt

Output Set: N:\CRF3\08062002\I920300A.raw

61 <210> SEQ ID NO: 3
 62 <211> LENGTH: 642
 63 <212> TYPE: DNA
 64 <213> ORGANISM: Homo sapiens
 66 <220> FEATURE:
 67 <221> NAME/KEY: misc_feature
 68 <222> LOCATION: 541, 598, 621, 639
 69 <223> OTHER INFORMATION: n = A,T,C or G
 71 <400> SEQUENCE: 3
 72 gtgctgtgtg taagtggaga acttggggat agaggaggaa gctcctcgtg gcccttccaa 60
 73 ggtgaggcaa aggcattctgg acttgttcca gccagccca ccgggtgaca tcaccgggca 120
 74 gggaggggtg ctggtggttg ttcatagcga gtaagctgct ctgcctgtgt gagggtctcc 180
 75 tgggccctaa acaggcaact ttaggccatg ggtcactcac cgtgagccat caatgtgtct 240
 76 tggcttgaca tggtttctct ctgtcttcta gtctagacct agtttttttg ttctgttccc 300
 77 cacgtatgga tatagtagag attgttgtct gtgaaatttc tctttttag attttgagtt 360
 78 ttcccttgta gtgtaaagaa tgatcacttt ctgtaacaat aacaagacca ctttttaaga 420
 79 tttatcctgt ttgttctttg ttgattgaaa cataataatt gttaaaattc tctacagcct 480
 80 tctttttctt ccatagctaa tcttccttct aatagttttt gctttctgtt ttgctgttgt 540
 81 ncttttgcaa agctttcccc tcatagcctg tacctgttat caatataaaa ataatctncc 600
 82 tgtgggaatg cttcattgac ntgaatttct cctttggana aa 642
 84 <210> SEQ ID NO: 4
 85 <211> LENGTH: 575
 86 <212> TYPE: DNA
 87 <213> ORGANISM: Homo sapiens
 89 <220> FEATURE:
 90 <221> NAME/KEY: misc_feature
 91 <222> LOCATION: 492
 92 <223> OTHER INFORMATION: n = A,T,C or G
 94 <400> SEQUENCE: 4
 95 ctggaagcca gttccagaa gaccaaactg catgcccaa tcgccaaagt aattttattct 60
 96 tattacttga tgtocaaag cttctttgag atttgctata aaatttccta tgatggtaga 120
 97 acgcaaatgt ccaacatgaa attttttggc aacattaggt gaactgaatt caaccacaat 180
 98 cttcttctgg ggaagtccag agaaaagttc actttttaat ccataatttg agccatcttc 240
 99 aattacttgt tgtagcactg tctttgttaa gagctctctg tttattttga aatttacagt 300
 100 cctttgacca gtactgattt cactcaccac tgtatcacat cttagcttct ctgctagtct 360
 101 cttggcttga acttgaatat ctggtcttga atggctcattg tctttttcca ataaagaatc 420
 102 cacagaaagc tgaaaatcag ctacttcttc tttttgggaa attggaactg cagatattga 480
 103 tgtgatcaag tnttctgggt gaagattcaa cactctggaa agctggcaag caatagcgcg 540
 104 gcgaaagccg cagccatgt ccacctctac gggaa 575
 106 <210> SEQ ID NO: 5
 107 <211> LENGTH: 558
 108 <212> TYPE: DNA
 109 <213> ORGANISM: Homo sapiens
 111 <400> SEQUENCE: 5
 112 caagaaaaag cggatggttg ttctgtctgc cctcaaggtc gtgctgtctga agcctacaag 60
 113 aaagtttgcc tatctggggc gcctggctca cgagggtggc tggaagtacc aggcagtgc 120
 114 agccaccctg gaggagaaga ggaagagaa agccaagatc cactaccgga agaagaaaca 180
 115 gctcatgagg ctacggaaac agccgagaa gaacgtggag aagaaaattg acaatacac 240
 116 agaggtcctc aagaccacg gactcctggt ctgagcccaa taaagactgt taattcctca 300

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/09/920,300A

TIME: 16:20:21

Input Set : A:\547.app.txt

Output Set: N:\CRF3\08062002\I920300A.raw

117 tgcgttgccct gcccttcctc cattgttgcc ctggaatgta cgggacccag gggcagcagc 360
 118 agtccagggt ccacaggcag ccctgggaca taggaagctt gggagcaagg aaagggctct 420
 119 agtcactgcc tcccgaagtt gcttgaaagc actcggagaa ttgtgcagggt gtcattttatc 480
 120 tatgacccaaa taggaaagag caaccagtta ctatgagtga aaggaggcca gaagactgat 540
 121 tgggagggcc ctatcttg 558

123 <210> SEQ ID NO: 6

124 <211> LENGTH: 451

125 <212> TYPE: DNA

126 <213> ORGANISM: Homo sapiens

128 <220> FEATURE:

129 <221> NAME/KEY: misc_feature

130 <222> LOCATION: 24, 301, 306, 375, 430

131 <223> OTHER INFORMATION: n = A,T,C or G

133 <400> SEQUENCE: 6

W--> 134 cctggcaggg aatgcaattc tcanagaaga caaagaccg caaaagatgt atgccaccat 60
 135 ctatgagctg aaagaagaca agagctacaa tgtcacctcc gtcctgttta ggaaaaagaa 120
 136 gtgtgactac tggatcagga cttttgttcc aggttgccag cccggcgagt tcacgctggg 180
 137 caacattaag agttaccctg gattaacgag ttacctcgtc cgagtgggtga gcaccaacta 240
 138 caaccagcat gctatggtgt tttcaagaa agttttctcaa aacaggggagt cttcaagatc 300
 W--> 139 nccctntacg ggagaaccaa ggagctgact tccgaactaa aggagaactt catccgcttc 360
 W--> 140 tccaaatatc tgggnctccc tgaaaaccac atcgtcttcc ctgtcccaat cgaccagtgt 420
 W--> 141 atcgaccggn tgagtgcaca ggtgccggca g 451

143 <210> SEQ ID NO: 7

144 <211> LENGTH: 555

145 <212> TYPE: DNA

146 <213> ORGANISM: Homo sapiens

148 <220> FEATURE:

149 <221> NAME/KEY: misc_feature

150 <222> LOCATION: 293, 469

151 <223> OTHER INFORMATION: n = A,T,C or G

153 <400> SEQUENCE: 7

154 gcatatttaa tgcacacatt tgaatgttac acataataa ttttaacgat ggagtccaag 60
 155 ttctggattt tacattagat ctgcatatat aagacacttg tgggtcaaatt tcaagattgg 120
 156 taaagccagt ttcaagctgc ttatatattg agtacagggt tcaactattac aaatgtatga 180
 157 tgttaaacta acaaactcat gaccttcaaa gatgtcttcg tcccacgcac acacatttgt 240
 W--> 158 aatttgtgtc catttgctat ttccttctt ctataatctt caaattatat agntatgcat 300
 159 tgagttccct atgcatctca cccatctcct ttatctcagc cttctcatac tttgccattc 360
 160 tcttctttct ggaaataacc agcacaacaa ttccagcaac aactgctatc accacaacca 420
 W--> 161 caataacagg caataacacc agctttttaga ccctgcattg agaattcang tgctttttca 480
 162 tcaacataat aaattaaagt ttgaccagga tccagatcca gttgttcccc atttactgtc 540
 163 aggtccattt totta 555

165 <210> SEQ ID NO: 8

166 <211> LENGTH: 277

167 <212> TYPE: DNA

168 <213> ORGANISM: Homo sapiens

170 <220> FEATURE:

171 <221> NAME/KEY: misc_feature

172 <222> LOCATION: 51, 76, 96, 118, 124, 163, 172

173 <223> OTHER INFORMATION: n = A,T,C or G

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/09/920,300A

TIME: 16:20:21

Input Set : A:\547.app.txt

Output Set: N:\CRF3\08062002\I920300A.raw

175 <400> SEQUENCE: 8

W--> 176 gtggagcagc tcctgtacga aagccctgag cgggtactccc gctcagtgtct nctcatcacc 60
 W--> 177 cagcacctca gcctgntgga gcaggctgac cacatnctct ttctggaagg aggcgctntc 120
 W--> 178 cggnaagggg gaaccaccca gcagctcatg gaaaaaaagg ggnngctactg gnccatgggtg 180
 179 caggctcctg cagatgtctc aaaatgaaag ccttctcaga cctgcgcact ccattctcct 240
 180 cccttttctt ctctctgttg tggagaacca cagagta 277

182 <210> SEQ ID NO: 9

183 <211> LENGTH: 474

184 <212> TYPE: DNA

185 <213> ORGANISM: Homo sapiens

187 <220> FEATURE:

188 <221> NAME/KEY: misc_feature

189 <222> LOCATION: 431, 446, 464

190 <223> OTHER INFORMATION: n = A,T,C or G

192 <400> SEQUENCE: 9

193 cctgcattgga ttccatgttc atgagtttgg agataatata gcaggctgta ccagtgcagg 60
 194 tcctcacttt aatcctctat ccagaaaaca cgggtgggcca aaggatgaag agaggcatgt 120
 195 tggagacttg ggcaatgtga ctgctgacaa agatgggtgtg gccgatgtgt ctattgaaga 180
 196 ttctgtgatc tctctctcag gagaccattg catcattggc cgcacactgg tgggtccatga 240
 197 aaaagcagat gacttgggca aaggtggaaa tgaagaaagt acaaagacag gaaacgctgg 300
 198 aagtcgtttg gcttgtgggtg taattgggat ccgccaata aacattccct tggatgtagt 360
 199 ctgaggcccc ttaactcatt tgttatcctg ctagctgtag aaatgtatcc tgataaacat 420
 200 taaacacttg naatcttaaa agtgggnattg tgtgactttt tcanaagttg cttt 474

202 <210> SEQ ID NO: 10

203 <211> LENGTH: 513

204 <212> TYPE: DNA

205 <213> ORGANISM: Homo sapiens

207 <220> FEATURE:

208 <221> NAME/KEY: misc_feature

209 <222> LOCATION: 499

210 <223> OTHER INFORMATION: n = A,T,C or G

212 <400> SEQUENCE: 10

213 cctataccat tcaaggacag tatgccattc cacagccaga tttagccaag ctgcaccagt 60
 214 tggcaatgca acagtctcat tttcccatga cgcattggca caccggattc agtggcattg 120
 215 aatccagctc tccagagggtg aaaggctatt gggcagggtt ggatgcatct gctcagacta 180
 216 cttctcatga actcaccatt ccaaacgatt tgattggctg cataatcggg cgtcaaggcg 240
 217 ccaaaatcaa tgagatccgt cagatgtctg gggcgcagat caaaattgctg aaccagtggtg 300
 218 aaggatctac tgataggcag gttaccatca ctggatctgc tgccagcatt agcctggctc 360
 219 aatatctaata caatgtcagg ctttctctcg agacgggtgg catggggagc agctagaaca 420
 220 atgcagattc atccataatc ctttctgtgt gttcaccacc acccatggat ccattctgtgt 480
 221 aagtttctga acagtcagnc gattccagggt ttt 513

223 <210> SEQ ID NO: 11

224 <211> LENGTH: 606

225 <212> TYPE: DNA

226 <213> ORGANISM: Homo sapiens

228 <220> FEATURE:

229 <221> NAME/KEY: misc_feature

230 <222> LOCATION: 365, 433, 507, 549, 591

231 <223> OTHER INFORMATION: n = A,T,C or G

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/09/920,300A

TIME: 16:20:21

Input Set : A:\547.app.txt

Output Set: N:\CRF3\08062002\I920300A.raw

233 <400> SEQUENCE: 11

234 ctgtctccca cccttgctgt gttgagtctg cgagcctggg atatgctaac tcgggggtga 60
 235 tacaacctgg aagaagaatg tgaggctctc ctggaaagat gcaaaaacca tctcagatcc 120
 236 aagggggccaa gatcacaagg tcctgctgct acctgagggg tctgaagctt tgagggcagg 180
 237 ggctggggag tcacaatcct gtgaggcagg gagagggaag agtcacaaac ccaactcagc 240
 238 gctattcttt agccctaggc gctttcactc ctcagtgcc tagaagtcac cagtaggtgt 300
 239 caactgggca gacaagggac aggaagacag ggatggccca gggcttttta cccgtttggt 360
 W--> 240 tttangcccg tttctccatt aagggatgca gaggcagggg tggagtgagt gaatgaatga 420
 W--> 241 gtcacatctc canaacagca ggaaggaaca gcctctgctg gcaatgacag ttccccagat 480
 W--> 242 gagatccctg gggctctgaa agggaanggc aagattcccc ccccaaatg ccccgggatt 540
 W--> 243 agggggcana tctgaaggga attcacaag gggcagccac agggagtgtc ntaccttcgg 600
 244 gccggc 606

246 <210> SEQ ID NO: 12

247 <211> LENGTH: 549

248 <212> TYPE: DNA

249 <213> ORGANISM: Homo sapiens

251 <220> FEATURE:

252 <221> NAME/KEY: misc_feature

253 <222> LOCATION: 34

254 <223> OTHER INFORMATION: n = A,T,C or G

256 <400> SEQUENCE: 12

W--> 257 aaaaaagaaa aagtgtttat tataggcaac aacnccaatg ggaactggta tttgtctaca 60
 258 ccaagggagt gcaatttttc atcttccaat ggcgccctca accttgaggc gaatccactg 120
 259 gcgaaagatg cctttctagg aagcagagct ccctgactgg gctaagatag ttcagattga 180
 260 tcttaggtca atggttaagac ctatgtagt ttatgaagtct tggcttttcg gcgctgggtc 240
 261 gcccaaagca gaatggagac ggtatagagt gtggctccca gaatcccgaa gaacataagc 300
 262 agtgagaacg agccctggcg catacatttg tatccatgga aaccatcagc acaaacacac 360
 263 tgcaaaagac ctggaccatc aggtacacaa gatccattct caggacacat ttctgggtcc 420
 264 ccagtgttat tgcaaagggt cttttgccct tgacagattt ggttgtctat ataagagggt 480
 265 atagtattcc agcattaatt cctccaggac agttgacatg ttgtggcagt atcagagtct 540
 266 ggagctgag 549

268 <210> SEQ ID NO: 13

269 <211> LENGTH: 723

270 <212> TYPE: DNA

271 <213> ORGANISM: Homo sapiens

273 <220> FEATURE:

274 <221> NAME/KEY: misc_feature

275 <222> LOCATION: 594, 603, 620, 665, 708

276 <223> OTHER INFORMATION: n = A,T,C or G

278 <400> SEQUENCE: 13

279 ctgggagcct ttgccatggt acttaggtag ggtgtgtgcc cccagattta accattccat 60
 280 aatcatgtta gagttacttc tataaagtga acagatttta ttaatcacgg cttttggtga 120
 281 atttgtttaa ggttaattat ggtagcaaat tttgggccta aacattattt ttctgtatcc 180
 282 cgctgtaatt cccaaaactc tcattattct ctaactatta cacatgggca tattctgatg 240
 283 ttctctatcc tttgccagaa gactacctta catccatcgt aattgttctc taggaaaaga 300
 284 gaactttttt caaaattcaa aatacttctt aaggatggca cagtaccata taactggagt 360
 285 aataaaacat gagcttacat tcttacaata actaaaccac ttaaaatgat caaggcacta 420
 286 atgttttggt ctgaaaagct gtgtacttta tagacatttt cagacatttt tggaaatttc 480
 287 cattaaaggt ggaaaatcta ttttttctc gttttgagcgt gtcttagttt gaatgaaaca 540

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.